Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

described as new. In a later publication[13] he considers the resupinate forms in which yellow is the predominant color, presenting sixteen species of *Poria*, seven of which are new.

BLAKE[14] has revised four genera of Compositae (Asteraceae) which are restricted in their distribution to the tropical and subtropical portions of North and South America, as follows: *Acanthospermum* (eight spp., three new), *Flourensia* (twenty-three spp., five new), *Oyedaea* (twelve spp., three new), and *Tithonia* (ten spp.). The revisions include full bibliography and lists of collections.

KAUFFMAN[15] has described a new genus (*Isoachlya*) of Saprolegniaceae, which is chiefly distinguished "by the presence of the cymose or *Achlya* mode of formation of secondary sporangia, coupled with diplanetic zoospores." It includes three species, one of which is new, the other two being transferred from *Achlya* and *Saprolegnia.*

NAKAI[16] has published a detailed monograph of the Caprifoliaceae of Japan, including 7 genera, 91 species, and 33 varieties. Besides the 15 new species, there are numerous transfers involving new names.

KUDO[17] has published an enumeration of the Labiatae of the Kurile Islands and Yezo Island, with full bibliography and citation of collections. The list includes 38 species, distributed among 21 genera. A new species is described in *Teucrium* and in *Scutellaria.*

BRITTON and ROSE[18] have described a new genus (*Neoabbottia*) of Cactaceae, a treelike form previously named *Cactus paniculatus* Lam., and later *Cereus paniculatus* DC. It is a monotypic genus of Hispaniola, dedicated to Dr. W. L. ABBOTT.—J. M. C.

Physical properties of protoplasm.—SEIFRIZ[19] has carried out microdissection of protoplasm from a number of lower animals and plants, and his work leads to the following conclusions. (1) There is a plasma membrane on the surface of all protoplasm; (2) physical considerations lead to belief in a differential surface layer of protoplasm; (3) plasma membrane differs in physical properties and probably in chemical constitution from the protoplasm it bounds; (4) the membrane is of high viscosity, probably a gel, which readily reverts to a liquid sol state; (5) it is capable of ready adjustment to changes in contour and area; (6) protoplasm in most cases forms a membrane almost instantly on the surface; exceptions are due to extreme liquidity; (7) the living membrane is rather delimited from the inner plasma, but it cannot be isolated from it; (8) the degenerated, coagulated plasma membrane can sometimes be isolated, being then of finer consistency, elastic, and exceedingly tough; (9) the nucleus and vacuoles also possess protoplasmic membranes resembling the outer plasma membrane; (10) the thickness of the membrane is probably about 0.1 μ.

---

[13] ———, Light-colored resupinate Polypores. IV. Mycologia **13**:171–178. 1921.

[14] BLAKE, S. F., Revisions of the genera *Acanthospermum, Flourensia, Oyedaea,* and *Tithonia.* Contrib. U.S. Nat. Herb. **20**:383–436. *pl. 23.* 1921.

[15] KAUFFMAN, C. H., *Isoachlya,* a new genus of the Saprolegniaceae. Amer. Jour. Bot. **8**:231–237. *pls. 13, 14.* 1921.

[16] NAKAI, TAKENOSHIN, Tentamen systematis Caprifoliacearum Japonicarum. Jour. Coll. Sci. Tokyo **43**: art. 2. pp. 139. 1921.

[17] KUDO, YUSHUN, Enumeratio Labiatarum specierum varietatum formarumque in Insulis Kurilensibus et Insula Yezoensi sponte nascentium. Jour. Coll. Sci. Tokyo **43**: art. 8. pp. 59. *pls. 2.* 1921.

[18] BRITTON, N. L., and ROSE, J. N., *Neoabbottia,* a new cactus genus from Hispaniola. Smithson. Miscell. Coll. **72**: no. 9. *pls. 1–4.* 1921.

[19] SEIFRIZ, W., Observations on some physical properties of protoplasm by aid of microdissection. Ann. Botany **35**:269–296. 1921.

Protoplasm, when dissected in water, in most cases is immiscible in it. When it is miscible, it is caused by extreme liquidity or disintegration. The immiscivity is possibly due to the colloidal and chemical nature of the protoplasm. The absorption and retention of water by protoplasm are essentially inhibition processes.—WM. CROCKER.

Food storage in cotyledons.—DUGGAR[20] has found that removal of the cotyledons of the pea seedling at an early stage of growth causes a much slower development of the plant, but their removal after the food is largely withdrawn causes no reduction in growth rate. Removal of the endosperm of the corn has far less effect. Glycocoll and sodium nucleinate in water culture partially substitute for the loss of the cotyledons. Asparaginate and alanin depress the growth with cotyledons removed. The author is to run experiments in sterile conditions to further test the possibility of organic materials substituting for the cotyledons.—WM. CROCKER.

Disease resistance.—McLEAN[21] concludes that Szinkum mandarin is resistant to citrus canker because its stomata are of such shape as to exclude liquid water and thus stop the entrance of the motile bacterium that produces the canker. The Florida seedling grapefruit which is susceptible to this disease has stomata of about the same size, but they are of such shape as to permit the accumulation of liquid water in the stomata and allow the entrance of the bacterium.—WM. CROCKER.

---

[20] DUGGAR, B. M., The nutrition value of food reserve in cotyledons. Ann. Mo. Bot. Gard. **7**:291–298. 1920.

[21] McLEAN, F. T., A study of the structure of the stomata of two species of *Citrus* in relation to the citrus canker. Bull. Torr. Bot. Club **48**:101–106. 1921.